

Claims:

1. An imaging method for combining first raster data and second raster data, comprising the steps of:

receiving the first raster data of a first image processed by at least one raster image processor;

receiving the second raster data of a second image processed by said at least one raster image processor; and

digitally combining the first raster data and the second raster data to form combined raster data representing a resultant image.

2. The method of claim 1 wherein the step of digitally combining comprises doubleburning.

3. The method of claim 1 wherein the step of digitally combining comprises masking.

4. The method of claim 1 wherein each of the first image and the second image comprises a color separation or a greyscale separation.

5. The method of claim 1 further comprising the step of rendering the combined raster data to a destination device selected from a group consisting of:

a platesetter for transferring said resultant image onto a printing plate;

an imagesetter for transferring said resultant image onto a medium;

a printer for printing said resultant image; and

a memory for storing said combined raster data.

6. The method of claim 1 wherein said at least one raster image processor comprises a page description language interpreter.

7. The method of claim 1 wherein the second raster data has substantially the same resolution as the first raster data.

8. The method of claim 1 further comprising, prior to the step of receiving first raster data, the steps of:

creating a first image file coded in a page description language;

receiving, by said at least one raster image processor, the first image file;

interpreting, by said at least one raster image processor, the first image file to produce the first raster data; and

transmitting, by said at least one raster image processor, the first raster data;

and wherein the method further comprises, prior to the step of receiving second raster data, the steps of:

creating a second image file coded in said page description language;

receiving, by said at least one raster image processor, the second image file;

interpreting, by said at least one raster image processor, the second image file to produce the second raster data; and

transmitting, by said at least one raster image processor, the second raster data;

9. The method of claim 8 wherein the method further comprises, after creating the first image file, the steps of:

receiving by a first image server the first image file;

storing in the first image server the first image file; and

transmitting by the first image server to said at least one raster image processor the first image file;

and wherein the method further comprises, after creating the second image file, the steps of:

receiving by a second image server the second image file;
storing in the second image server the second image file; and
transmitting by the second image server to said at least one raster image processor the second image file.

10. A print drive for controlling operations in a prepress printing system having at least one raster image processor, the print drive comprising:

a print drive input terminal receiving, from the at least one raster image processor, first raster data of a first image and second raster data of a second image; and

a digital image combiner electrically coupled to the print drive input terminal, the digital image combiner digitally combining the first raster data and the second raster data to form combined raster data representing a resultant image.

11. The print drive of claim 10 wherein the digital image combiner comprises a doubleburner.

12. The print drive of claim 10 wherein the digital image combiner comprises a masker.

13. The print drive of claim 10, wherein each of the first image and the second image comprises a color separation or a greyscale separation.

14. The print drive of claim 10, further comprising a print drive output terminal in electrical communication with the digital image combiner, the print drive output terminal capable of transmitting the combined raster data to a destination device selected from a group consisting of:

a platesetter for transferring said resultant image onto a printing plate;
an imagesetter for transferring said resultant image onto a medium;

a printer for printing said resultant image; and
a memory for storing said combined raster data.

15. The print drive of claim 10 wherein the at least one raster image processor comprises a page description language interpreter.

16. The print drive system of claim 10 wherein the second raster data has substantially the same resolution as the first raster data.

18. The print drive of claim 12 wherein the prepress printing system, in electrical communication with the print drive input terminal, comprises: a general purpose computer having imaging software for producing both a first image file and a second image file coded in a page description language; and wherein the at least one raster image processor, in electrical communication with the general purpose computer, receives and converts the first image file and the second image file, respectively, to said first raster data and second raster data.

19. The print drive of claim 18 wherein the prepress printing system further comprises an image server in electrical communication with the general purpose computer and the at least one raster image processor, the image server comprising:

an image server receiver for receiving from the general purpose computer the first image file and the second image file;

an image server data store in electrical communication with the image server receiver, the image server data store storing the first image file and the second image file; and

an image server transmitter, in electrical communication with the image server data store, for transmitting to said at least one raster image processor the first image file and the second image file.

20. An imaging system for digital doubleburning or digital masking, comprising:

an image acquisition device for acquiring a first image and a second image;
at least one raster image processor, in electrical communication with the image
acquisition device, for processing the first image to create first raster data and for processing the
second image to create second raster data; and
a print drive in electrical communication with said at least one raster image processor, the
print drive digitally combining the first raster data and the second raster data to form combined
raster data representing a resultant image.

21. The imaging system of claim 20, further comprising a destination device in
electrical communication with said print drive and selected from a group consisting of:

a platesetter for transferring said resultant image onto a printing plate;
an imagesetter for transferring said resultant image onto a medium;
a printer for printing said resultant image; and
a memory for storing said combined raster data.

22. A method for imaging, comprising:

receiving first raster data of a first image processed by at least one raster image processor;
receiving second raster data of a second image processed by said at least one raster image
processor representing a modification to the first image;

receiving mask raster data of the second image processed by said at least one raster image
processor representing a mask of the modification to the first image;

digitally masking the first raster data with the mask raster data to form masked first raster
data; and

digitally combining the masked first raster data and the second raster data to form
modified raster data representing a resultant image.

23. The method of claim 22 wherein each of the first image and the second image
comprises a color separation or a greyscale separation.

24. The method of claim 22 further comprising the step of rendering the modified raster data to a destination device selected from a group consisting of:

- a platesetter for transferring said resultant image onto a printing plate;
- an imagesetter for transferring said resultant image onto a medium;
- a printer for printing said resultant image; and
- a memory for storing said combined raster data.

25. A print drive for controlling operations in a prepress printing system, the print drive comprising:

a print drive input terminal receiving, from said at least one raster image processor, first raster data of a first image and second raster data and mask raster data of a second image;

a digital masker in electrical communication with the print drive input terminal, the digital masker digitally masking the first raster data with the mask raster data to form masked first raster data; and

a digital doubleburner in electrical communication with the print drive input terminal and the digital masker, the digital doubleburner combining the masked first raster data and the second raster data to form modified raster data representing a resultant image.

26. The print drive of claim 25, further comprising a print drive output terminal in electrical communication with the digital doubleburner, the print drive output terminal capable of rendering the modified raster data to a destination device selected from a group consisting of:

- a platesetter for transferring said resultant image onto a printing plate;
- an imagesetter for transferring said resultant image onto a medium;
- a printer for printing said resultant image; and
- a memory for storing said combined raster data.